

Abstract

A droplet operation device has a substrate with light transmissibility and having been subjected to a water repellent treatment, a way for supplying droplets onto the substrate, a way for transporting the droplets on the water repellent substrate, and a way for measuring the state of the droplets. The droplet operation device includes the light transmittable substrate, solvent feeding ports for leading reagent or specimen droplets onto the substrate, optical measuring units, and electric field application units. As a result, the inside of the droplets can be observed with a microscope, and results of the reaction of the droplets against other droplets can be measured and classified by stopping and moving the droplets in any direction.